

IN THE CLAIMS:

1. (previously presented) A uniform resource indicator (URI) pointer method for the retrieving Moving Picture Experts Group 4 (MPEG-4) data pointers in a Moving Picture Experts Group 2 (MPEG-2) transport stream (TS), the method comprising:

receiving an MPEG-2 TS embedded with MPEG-4 resources organized in Object Carousel (OC) transport protocol;

locating a URI in the TS using a local identifier (lid) retrieved from the MPEG-2 TS;

retrieving MPEG-4 resources from the MPEG-2 TS using lid URIs to provide a binding name and access scheme to the objects in the OC; and,

decoding the MPEG-4 resources.

2-5. canceled

6. (previously presented) The method of claim 1 wherein using lid URIs to provide a binding name and access scheme to the objects in the OC includes using a lid URI embedded in an Initial Object Descriptor (IOD) to locate resources in the OC selected from the group including a Binary Format for Scenes (BIFS) scene description stream and an object descriptor stream.

7. (previously presented) The method of claim 1 wherein using an OC transport protocol includes forming a hierarchical directory structure.

8. (original) The method of claim 7 wherein forming a hierarchical directory structure includes forming a hierarchical directory structure including a root directory, sub-directories, files, and streams.

9. (previously presented) The method of claim 1 wherein receiving an MPEG-2 TS includes receiving a first MPEG-2 TS and a second MPEG-2 TS;

wherein locating a URI in the TS includes retrieving a lid URI in the first MPEG-2 TS; and,

wherein retrieving MPEG-4 resources in response to accessing the lid URI includes retrieving MPEG-4 resources from the second MPEG-2 TS.

10. (original) The method of claim 1 wherein retrieving MPEG-4 resources in response to accessing the address includes retrieving MPEG-4 resources selected from the group including audio, video, and systems data.

11. (original) The method of claim 1 wherein decoding the MPEG-4 resources includes an action selected from the group including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS, and using the systems data to establish an interactive audiovisual scene and communication link.

12. (original) The method of claim 7 further comprising:

 caching the OC hierarchical directory.

13. (original) The method of claim 12 further comprising;
using the cached OC hierarchical directory to retrieve MPEG-4 resources.

14. (original) The method of claim 10 further comprising:
establishing an interactive audiovisual scene and communication link in response to decoding MPEG-4 systems data.

15. (previously presented) A uniform resource indicator (URI) pointer method for broadcasting pointers to Moving Picture Experts Group 4 (MPEG-4) data in a Moving Picture Experts Group 2 (MPEG-2) transport stream (TS), the method comprising:

embedding MPEG-4 resources in the MPEG-2 TS, organized in an Object Carousel (OC) transport protocol;

generating a local identifier (lid) URI for accessing MPEG-4 resources, using the lid URIs to provide a binding name and access scheme to the objects in the OC;

embedding the URI in an MPEG-2 TS; and,
broadcasting the MPEG-2 TS.

16-19. canceled

20. (previously presented) The method of claim 15 wherein using lid URIs to provide a binding name and access scheme to

the objects in the OC includes using a lid URI embedded in an Initial Object Descriptor (IOD) to locate resources in the OC selected from the group including a Binary Format for Scenes (BIFS) scene description stream and an object descriptor stream.

21. (previously presented) The method of claim 15 wherein using an OC transport protocol includes forming a hierarchical directory structure.

22. (original) The method of claim 21 wherein forming a hierarchical directory structure includes forming a hierarchical directory structure including a root directory, sub-directories, files, and streams.

23. (previously presented) The method of claim 15 wherein embedding the URI in an MPEG-2 TS includes locating a lid URI in a first MPEG-2 TS;

wherein embedding MPEG-4 resources in the MPEG-2 TS includes embedding MPEG-4 resources in a second MPEG-2 TS; and,

wherein broadcasting the MPEG-2 TS includes broadcasting the first and second MPEG-2 TSs.

24. (original) The method of claim 15 wherein generating a URI for accessing MPEG-4 resources located at an address includes accessing MPEG-4 resources selected from the group including audio, video, and systems data.

25. (previously presented) The method of claim 15 wherein generating a URI for accessing MPEG-4 resources includes resources selected from the group including enhanced audio data in the MPEG-2 TS, enhanced video data in the MPEG-2 TS, and systems data for the establishment of an interactive audiovisual scene and communication link.

26. (previously presented) In a receiver for decoding Moving Picture Experts Group 4 (MPEG-4) data, a uniform resource indicator (URI) pointer system for accessing pointers to MPEG-4 data from a[[n]] Moving Picture Experts Group 2 (MPEG-2) transport stream (TS), the system comprising:

- a receiver having an interface for accepting an MPEG-2 TS with an embedded URI for accessing MPEG-4 resources;

- an address access unit having an interface to accept the MPEG-2 TS from the receiver, the address access unit locating a local identifier (lid) URI in the TS, and retrieving MPEG-4 resources embedded in the MPEG-2 TS organized in Object Carousel (OC) transport protocol by building the OC in a directory and using lid URIs to provide a binding name and access scheme to the objects in the OC; and,

- a decoder having an interface connected to the address access unit for receiving the MPEG-4 resources and supplying decoded the MPEG-4 information.

27-30. canceled

31. (previously presented) The system of claim 26 wherein the address access unit uses a lid URI embedded in an Initial Object Descriptor (IOD) to locate resources in the OC selected from the group including a Binary Format for Scenes (BIFS) scene description stream and an object descriptor stream.

32. (previously presented) The system of claim 26 wherein the address access unit builds an OC hierarchical directory.

33. (original) The system of claim 32 wherein the address access unit OC hierarchical directory includes a root directory, sub-directories, files, and streams.

34. (previously presented) The system of claim 26 wherein the address access unit receives a first MPEG-2 TS and a second MPEG-2 TS, retrieves a lid URI in the first MPEG-2 TS, and uses the lid URI to retrieve MPEG-4 resources from the second MPEG-2 TS.

35. (original) The system of claim 26 wherein the decoder supplies MPEG-4 resources selected from the group including audio, video, and systems data.

36. (original) The system of claim 26 wherein the decoder supplies resources selected from the group including enhanced audio data in the MPEG-2 TS, enhanced video data in the MPEG-2 TS, and systems data to establish an interactive audiovisual scene and communication link.

37. (previously presented) The system of claim 26 further comprising:
a cache mechanism for storing the OC hierarchical directory.

38. (original) The system of claim 37 wherein the address access unit uses lid URIs to retrieve MPEG-4 resources from the OC hierarchical directory in the cache mechanism.

39. (original) The system of claim 35 further comprising:
a transmitter having an interface to send MPEG-4 information;
an interactive audiovisual scene and communication link, including the transmitter and receiver, formed in response to decoding MPEG-4 systems data, sending and receiving MPEG-4 information.

40. (previously presented) In a Moving Picture Experts Group 4 (MPEG-4) broadcaster, a uniform resource indicator (URI) pointer system for supplying a Moving Picture Experts Group 2 (MPEG-2) transport stream (TS) with URIs for accessing MPEG-4 data, the system comprising:

an encoder having an interface to accept MPEG-4 information and to supply encoded MPEG-4 resources;

an address pointer unit having an interface to accept the encoded MPEG-4 resources, the address pointer embedding the encoded MPEG-4 resources in a MPEG-2 TS using an Object Carousel (OC)

transport protocol, generating a local identifier (lid) URI for accessing the MPEG-4 resources in the MPEG-2 TS using lid URIs to provide a binding name and access scheme to the objects in the OC, and having an interface to supply the MPEG-2 TS; and,

a transmitter having an interface to accept the MPEG-2 TS from the address pointer unit and to broadcast the MPEG-2 TS.

41-44. canceled

45. (previously presented) The system of claim 40 wherein the address pointer unit uses a lid URI embedded in an Initial Object Descriptor (IOD) to locate resources in the OC selected from the group including a Binary Format for Scenes (BIFS) scene description stream and an object descriptor stream.

46. (previously presented) The method of claim 40 wherein the address pointer unit forms an OC system hierarchical directory structure.

47. (original) The system of claim 46 wherein the address pointer forms an OC transport protocol hierarchical directory structure including a root directory, sub-directories, files, and streams.

48. (previously presented) The system of claim 40 wherein the address pointer unit forms a lid URI in a first MPEG-2 TS, and embeds MPEG-4 resources in a second MPEG-2 TS; and,

wherein the transmitter broadcasts the first and second MPEG-2 TSs.

49. (original) The system of claim 40 wherein the address pointer unit generates URIs for MPEG-4 resources selected from the group including audio, video, and systems data.

50. (original) The system of claim 40 wherein the address pointer unit generates URIs for MPEG-4 resources selected from the group including enhanced audio data in the MPEG-2 TS, enhanced video data in the MPEG-2 TS, and systems data for the establishment of an interactive audiovisual scene and communication link.